16. A method of diagnosing a risk of developing insulin resistance in a mammal, comprising determining the level of Mal1 transcripts or polypeptide in a tissue sample, wherein an increase in the level of said transcripts or said polypeptide in said tissue compared to a normal control tissue indicates that said mammal is at risk of developing insulin resistance.

21. The method of claim 16, wherein said increase is 5% more than a normal control value.

22. The method of claim 16, wherein said increase is 10% more than a normal control value.

23. The method of claim 16, wherein said increase is 20% more than a normal control value.

24. The method of claim 16, wherein said increase is 50% more than a normal control value.